

USNC-URSI
Executive Council Meeting Minutes
July 11, 2020
Online Meeting



1) Call to Order and Introductions (Sembiam Rengarajan)

Sembiam Rengarajan, the Chair of USNC-URSI, called the meeting to order at 12:12 pm EDT.
The following Members of USNC were present at the Executive Council Meeting:

USNC-URSI Officers

Sembiam Rengarajan (Chair)
Michael Newkirk (Secretary and Chair-Elect)
David Jackson (Immediate Past Chair)
Gary Brown (Accounts Manager)

National Academies Staff (non-voting)

Ana Ferreras

Commission Chairs (or Vice Chairs/Secretaries)

Jeanne Quimby (Commission A Chair)
Jamesina Simpson (Commission B Chair)
Eric Mokole (Commission C Chair)
Negar Ehsan (Commission D Chair)
Larry Cohen (Commission E Chair)
Kamal Sarabandi (Commission F Chair)
Attila Komjathy (Commission G Chair)
Mark Golkowski (Commission H Vice-Chair)
Jeff Mangum (Commission J Chair)
Alyson Ford (Commission J Vice-Chair)
Majid Manteghi (Commission K Chair)

Women in Radio Science Chair

Reyhan Baktur

U. S. Officers of URSI

Ross Stone (Assistant Secretary General - Publications)

Student Paper Competition Coordinator

Erdem Topsakal

2) Approval of the Agenda (Rengarajan)

The updated agenda for the meeting was discussed and approved (M: Stone; S: Brown).

3) Approval of the Minutes (Rengarajan)

The minutes of the January 2019 Executive Council Meeting in Boulder, CO, were approved (M: Stone; S: Brown).

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4) Comments from Commissions about the 2020 NARSM (Rengarajan)

- Sembiam showed final 2020 NARSM data that indicated the number of registrations was 2764, and the number of recorded (presented) papers was 1329. The total number of accepted papers was 1617 (1168 for AP-S and 449 for URSI), and the number of withdrawn papers was 288. The most likely reason for the large number of withdrawn papers is the COVID-19 situation, which may have prevented some authors from participating or caused them to feel that they may not want to participate online. Mike mentioned that some US government submitters were unable to get release approvals for their videos on the short timeline given by the organizers.
- The 2020 Montreal and 2019 Atlanta meetings were compared. The number of submitted papers was higher for Montreal (1798 vs. 1590), but accepted papers was slightly lower for Montreal (1514 vs. 1516), and after removing withdrawn papers for each meeting, there were also fewer papers presented this year (1226 vs. 1469).
- The 2020 Montreal and 2015 Vancouver NARSMs were compared. There were nearly 200 less submissions to Montreal (1798 vs. 1974) and just over 500 fewer papers presented (1329 vs. 1836).
- The number of URSI papers at the 2020 and 2019 meetings was compared. There was an expectation that there would be more at this NARSM given there was not a NRSM in January 2020. One possible reason was the close timing of the URSI GASS, and some authors may have had to choose between the two meetings at the time of submission.
- There were 20 special sessions at the 2020 NARSM, one was URSI-only and eleven were joint AP-S/URSI sessions.
- Each Commission was responsible for scheduling their own online Business Meeting during the NARSM. Sembiam reported that feedback was generally positive in those meetings, and suggested we consider including online participants in future meetings regardless of the conference format.
- Feedback was sought on the quality of the pre-recorded presentations. The consensus is that the recordings were of very high quality, perhaps better than seen in past presentations. However, it was noted that the interaction during the sessions (by way of the ON24 platform's chat function) was either very limited or non-existent.

5) Commission Business Reports: Update on Officers, New Members and 2021 NRSM Special Sessions (Newkirk)

- Mike reported that a vote was conducted by USNC-URSI Commission A to switch their Vice-Chair and Secretary positions. Commission E was unable to meet during the past week but will conduct an email exchange to gather feedback from members.
- There were 14 new members elected into the Commissions since the January 2020 NRSM; one was an Early Career Member, four were Associate Members, and nine were regular members.
- Commissions provided a good list of Special Session titles for the 2021 NRSM. Several are co-organized between Commissions. Commission J has a potential special session

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on “Cubesats/Smallsats for Astronomy” by Kuiper & Rahmat-Samii. Commissions A and B expressed interest in joining the session. In addition, Commission A is interested in co-organizing a session on Rural Communications with Commission C. Commission C wishes to join with K on the Electromagnetic Imaging and Sensing Applications session. Gary noted that there is a lot of competition for RF spectrum and thought this might be a good topic for a special session. Commissions A, C, E and J are all interested. Commission K suggested that automotive radar may be a concern as well. Commission E suggested joining in such a session.

- Chairs were asked to provide final details on their special sessions to Mike and Sembiam by July 17, 2020.

6) Commission Business Reports: Feedback from the Commissions (Newkirk)

- Mike summarized the responses to actions assigned to the Commission Business Meetings:
 1. Feedback on participation in the 2021 ICEAA-APWC conference in September 2021, in Honolulu, HI:
 - Ross reported that URSI set the dates of the 2021 GASS to August 28–September 4. As a result, the dates for the 2021 ICEAA-APWC conference to August 9–13 rather than in September, as announced at the Business Meeting. The consensus is that most Commissions wish to participate, assuming the September dates. Commission H noted lack of interest due to proximity to the URSI 2021 GASS. Commission J has no interest in participating.
 2. Is there interest in having a printed NRSM program if a small fee is charged?
 - Some members still desire the printed program, and the consensus is that most members are OK with a small fee to cover the cost.
 3. Feedback on why there were only seven Student Paper Competition (SPC) submissions this year?
 - Most cited the late announcement of the competition, coupled with the short timeline for submission, especially for journal-length papers. In addition, once the COVID pandemic started, there was some concern that the conference would be cancelled.
 - Based on some comments on paper length and required effort from one Commission, Chairs were reminded that the SPC paper reviews satisfy the requirements for reviews in a journal like Radio Science. Once the SPC is complete, the students are encouraged to submit their papers to a journal.
 4. Comments on holding the 2021 NRSM online vs. in-person. If held in-person, what percentage of members would attend?
 - Consensus was that most are not comfortable with an in-person meeting. Several good suggestions were made that will help the Executive Committee plan for the meeting online.
 5. Comments on holding future NRSMs in Miami:

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- General observations included a slightly greater preference to stay in Boulder and its more intimate environment; most would like to see cost comparisons for the attendees (including students) before deciding; and some are willing to try Miami once and then decide whether to continue there. There was some discussion on timing relative to when FIU classes are held and whether it could be held to de-conflict with other meetings. Ross and Mike still intend to make a site visit when the COVID-19 restrictions are lifted, after which a final decision can be made.
- 6. Nominations for USNC-URSI Secretary/Chair Elect (2022-2023):
 - Commissions were asked to provide nominations and a few suggestions were given. Members were encouraged to submit names to USNC-URSI Chair.
- 7. Other topics of discussion:
 - Commission A was interested in developing a virtual short course on rural communications and propagation. Jeanne will work on this within her Commission and then coordinate with Jeff Mangum for use in future NRSMs.
 - Commission J requested participation information (from data showing online participant connection to sessions) for the current NARSM to assess interest in URSI. This could be used as a measure of the effectiveness of the virtual meeting format.
 - Commissions were asked to provide feedback on their impressions of the virtual NARSM, to help determine how the 2021 NRSM will be arranged, since we seem to be heading toward a virtual meeting.
- A motion (M: Newkirk, S: Stone) passed unanimously to revise the USNC-URSI Early Career Member (ECM) definition to remove the age limitation. Requirements for enrollment in a US University or employment in the US, as well as residence in the US (regardless of citizenship status) remain unchanged. After considerable discussion, the amended motion was:
 - Nominees for Early Career Member are limited to individuals having ten (10) years or fewer of professional experience since their last bachelor's or higher degree. The experience need not be continuous.

The Membership Guidelines document will be updated accordingly and posted on the USNC-URSI website.

7) Report by the Chair of USNC Women in Radio Science Chapter (Baktur)

- Reyhan reported that the WIRS Chapter has eight founding members, and the Chapter sponsored the joint IEEE AP-S WIE/USNC-URSI WIRS reception at the NARSM that featured Dr. Cynthia Furse as the keynote speaker and panel discussion with Dr. Furse, Dr. Ana Ferreras and Dr. Emily Porter, moderated by Reyhan and Dr. Natalia Nikolova. The event was very well-received.
- WIRS plans to have its first Business Meeting at the January 2021 NRSM, where Chapter membership requirements will be formalized, as well as installing officers. There will be a featured, keynote speaker and reception. Reyhan has invited Christina

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Koch, a NASA Astronaut and Electrical Engineer. Jeanne Quimby offered to help find speakers through NIST.

8) Discussion of the Student Paper Competition (Topsakal)

- The regular SPC process was reviewed by Erdem. This involves submission of an abstract plus a full-length paper and there are usually 25-30 papers each year. Each paper is reviewed by three reviewers, using the standard Radio Science review form, and is scored from 1 to 10, with 10 being the highest score. The reviewers' scores are averaged and the top 5 from across the Commissions are selected for review by the Commission Chairs. The Chairs then rank the five papers to select the top three for the final competition. These three students present their papers to the judges in a special session, and the judges rank the presentations to select the order of the finalists.
- This year there were only seven submissions, due to reasons described in Paragraph 6.3. Only five papers qualified for the competition and two of these received rather low overall scores, so a decision was made to have only three compete for the prizes. For the first time, the presentations were given on Zoom, which was arranged by Ana and the National Academies staff. The judges consisted of the Chairs of the USNC- and CNC-URSI Commissions, or their delegates. After the judging was completed, there was a single first-place paper and a tie for second place. Both second place awardees received the full second place prize.
- There was some discussion about how and when the judging was conducted in a separate Zoom session. There was some confusion for the judges, which resulted in a couple of them being late to that meeting. Subsequent to the SPC meetings and during this discussion, there were requests to consider a different method of voting, as well as use of double-blind reviews such as is done for the AP-S SPC. Erdem agreed to revisit the process and Mike agreed to work with him to implement some recommendations to improve the process in the future, especially for the expected virtual format at the upcoming NRSM.

9) Discussion of the 2021 NRSM in Boulder (Rengarajan)

- Commission feedback will be used to develop the online NRSM 2021 format and the different options to make it as interactive as possible. Commissions will be informed about the format well before the submission deadline.
- Sembiam reviewed three potential Plenary speakers and topics:
 - Kip Thorne, Caltech, *Gravitational Waves (yet to confirm)*
 - Nader Engheta, University of Pennsylvania, *Unconventional Electromagnetics*
 - Linda Katehi, Texas A&M, *Embodied Intelligence in Electronics: A New Era in High Frequency Circuit Design*

He plans to settle on the speakers within the next few weeks.

10) Discussion of the Commission Websites and USNC Archive (Rengarajan)

- Commissions were again reminded to provide updates to their pages on the USNC-URSI website. Commissions C, E and K have no pages; only Commissions A, B, D, F

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and J have posted their meeting minutes; and only Commissions B, D, F and J have posted membership lists. Please contact Chelsea Bock (CBock@nas.edu) to update these pages.

11) Discussion of Commission Membership Lists (Rengarajan)

- Each Commission is to update their membership list with any new members' information and any changes for current members, then send to Michael Newkirk by August 31, 2020.
- New members will receive a letter from the National Academies welcoming them as USNC-URSI Commission members.

12) Other items for Discussion

- Commission D announced that they have started a collaboration with the IEEE MTT Society. Negar will contact Sembiam to provide more details and to set up a meeting between Commission D and MTT contacts.
- David Jackson asked if it would be possible to get some information on why there were so many withdrawn papers at the NARSM. Mike noted that we will inform our members of the conference format in advance and therefore expect fewer withdrawn papers due to any late change of format. Ana informed us that Chelsea can help conduct surveys, if interested.

13) Adjournment

The meeting adjourned at 2:54 pm EDT (M: Stone; S: Sarabandi).